WE CLAIM:

1. A variant HGF protein comprising an amino acid modification that disrupts, deletes, or alters a cleavage site for serine protease Factor XIa or kallikrein corresponding to the cleavage site Arg424-His425 of human HGF.

2. The variant HGF of claim 1, further comprising a second amino acid modification that disrupts, deletes, or alters a cleavage site for serine protease Factor XIa or kallikrein corresponding to the cleavage site Arg494-His49.

3. The variant HGF of claim 1, wherein said modification comprises Arg424Ala.

4. The variant HGF of claim 2, wherein said second modification comprises Arg494Glu.

5. The variant HGF of claim 1, wherein said modification comprises substitution of Arg424 with a non-basic amino acid.

6. A nucleic acid sequence encoding the variant HGF of any of claims 1-5.

7. A replicable expression vector comprising the nucleic acid sequence of claim 6.

8. A host cell transformed with the vector of claim 7.

9. The nucleic acid sequence of claim 6, wherein the HGF protein is a human HGF protein.

10. A fragment of a hepatocyte growth factor protein consisting essentially of amino acids 1-424 of wild type human hepatocyte growth factor or variant thereof.

11. A nucleic acid sequence encoding the fragment of claim 10.

12. A replicable expression vector comprising the nucleic acid sequence of claim 11.

13. A host cell transformed with the vector of claim 12.

14. A nucleic acid sequence according to claim 11, wherein the hepatocyte growth factor is a human hepatocyte growth factor.

15. An HGF polypeptide consisting essentially of amino acids 1-424 in an alpha chain and amino acids 425-494 in an alpha chain, where the amino acids are numbered according to that of human HGF.

16. A nucleic acid sequence encoding the HGF polypeptide of claim 15.

17. A method for activating HGF comprising contacting said HGF with a serine protease selected from factor XIa or kallikrein.

18. An HGF polypeptide consisting essentially of amino acids 425 to 494 of human HGF or variant thereof.

19. A polypeptide comprising an HGF fragment having residues 1-424 of HGF fused to a heterologous sequence.

20. A polypeptide comprising an HGF fragment having residues 425-494 of HGF fused to a heterologous sequence.

21. A polypeptide comprising a first HGF fragment having residues 1-424 of HGF and a second HGF fragment having residues 425-494, wherein the first and second HGF fragments are linked through a non-peptide bond.

22. A polypeptide comprising a first HGF fragment having residues 1-424 of HGF and a second HGF fragment having residues 425-494, wherein the first and second HGF fragments are non-contiguous.

23. A polypeptide comprising an HGF fragment having residues 425-494 of an alpha chain fused to at least a portion of HGF β chain.

24. A polypeptide comprising an HGF fragment having residues 425-494 of an alpha chain linked through a non-peptide bond to at least a portion of HGF β chain.

25. A polypeptide consisting essentially of a first HGF fragment having residues 1-424 of HGF and a second HGF fragment having residues 425-494, wherein the first and second HGF fragments are linked through a non-peptide bond.

26. A polypeptide consisting essentially of a first HGF fragment having residues 1-424 of HGF and a second HGF fragment having residues 425-494, wherein the first and second HGF fragments are non-contiguous.

27. A polypeptide consisting essentially of an HGF fragment having residues 425-494 of an alpha chain fused to at least a portion of HGF β chain.

28. A polypeptide consisting essentially of an HGF fragment having residues 425-494 of an alpha chain linked through a non-peptide bond to at least a portion of HGF β chain.